Supreme Court, U.S.
FILED

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OFFICE OF THE CLERK

No.

IN THE

Supreme Court of the United States

In re EURICA CALIFORRNIAA,
Petitioner,

v.

WILLIAM K. SUTER, CLERK OF THE
SUPREME COURT OF THE UNITED STATES,
Respondent.

On Petition for Extraordinary Writ of Mandamus

PETITION FOR EXRAORDINARY WRIT OF MANDAMUS

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CAPITAL CASE

QUESTIONS PRESENTED

1. Whether the Court has signaled to the Clerk that anyone who is subject to an abortion will not be considered for a stay of lethal execution?

2. Whether granting inferior legal status to the gestational child is prohibited by Article I, Section 9, Clause 8 of the United States Constitution relating to titles of nobility?

3. Whether an actual priority of rights is to be assigned to the person at conception?

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PETITION FOR MANDAMUS

I, Eurica Californiaa, petition this Court for an extraordinary Writ of Mandamus.

OPINIONS BELOW

The order of the United States district court for the central district of California appears at Appendix A to the petition and is unpublished.

JURISDICTION

This Court has jurisdiction under Supreme Court Rule 20.

Why relief cannot be obtained elsewhere:

In 1995 the lower court made an inexcusable error: It refused to consider a Writ of Habeas Corpus simply because a related action had been dismissed. Because the standard of the Writ is to include all claims for relief in a single petition, application for a stay of lethal execution was included with the request for Habeas Corpus.

The correct policy, of course, is that the Great Writ may be applied for at any time. Therefore, even if the lower court had had an alternative preference for managing the Writ, the correct procedure would have been to redirect the request accordingly.

By stifling the request for the Writ the lower court committed a grave error. This error presents a very unusual circumstance: Relief cannot be sought from courts below because the requested Writ was stifled by the lower court, yet there remains a clear, ongoing need for the Writ to be granted, including granting of the related stay of lethal execution, which is no less pertinent today.

The unusual circumstance presented by the grave error of the lower court is that I have legal standing to apply to this Court for the requested relief perpetually until the court redresses the matter of the lower court's error. Simple denial of a petition by this Court does not in itself redress the matter of the lower court's error. Therefore, the problem of the lower court's error can only be redressed based on an explicit indication from this Court to remedy the matter.

Rather than resenting this unusual circumstance, the Court should instead be more apt to focus on the implications associated with mismanagement of the Great Writ. And so my petitions should be viewed by the Court as an opportunity to address in a remedial fashion the grave issue of Habeas Corpus mismanagement.

My present petition is especially poignant because it focuses on the additional problem of mismanagement of a stay of lethal execution by the Clerk of this Court. For in my effort to remedy the lower court's error, the Clerk committed a substantially similar and no less grave error: stifling my request for a stay of lethal execution. Note that the request for stay was in continuation of the same request made at the lower court, namely, the one associated with the original request for Habeas Corpus made at the lower court. Thus, my present petition focuses both on the lower court's error as well as on the subsequent error committed by the Clerk of this Court in the course of seeking relief from the lower court's error. Obviously, it would be unproductive to apply to the lower court to remedy a matter which the lower court has not only refused to consider, but also one that now in the course of affairs has implicated the actions of the Clerk of this Court. For it would be unexpected in any case for a lower court to presume to dictate matters to the Clerk of this Court, and in such a manner as might appear to infringe upon the province of this Court to dictate Court policy to its own Clerk.

The Clerk of this Court has ministerial duty to competently handle an application for a stay of lethal execution. Therefore, it falls more or less exclusively on the Court to exercise its extraordinary jurisdiction under Supreme Court Rule 20 to direct the Clerk in the ministry of this solemn duty. For otherwise it would imply that this Court needs direction from courts below in order to direct its Clerk in the basic performance of his clerical duties!

For these reasons relief cannot be obtained elsewhere.

CONSTITUTIONAL AND STATUTORY PROVISIONS INVOLVED

U.S. Const. Preamble reads verbatim in relevant part: "We the People of the United States, in Order to … secure the Blessings of Liberty to ourselves and our Posterity, do ordain and establish this Constitution for the United States of America."

U.S. Const. Art. 1, Sec. 9, Cl. 8 reads verbatim in relevant part: "No Title of Nobility shall be granted by the United States."[1]

35 U.S.C. 102 Sec. 102(g) reads verbatim in relevant part: "In determining priority of invention under this subsection, there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other."[2]

STATEMENT OF THE CASE

On 6/8/95 I filed a request for Habeas Corpus in the United States district court for the central district of California, including a related request for a stay of lethal execution.

By minute order entered 6/20/95 the lower court struck the request on the ground that a related case had already been dismissed. See Appendix A.

On 10/5/04 I delivered to the Clerk of this Court with proof of service a related application for a stay of lethal execution addressed to Justice O'Connor. The Clerk of this Court mishandled and effectively stifled the application.

REASONS FOR GRANTING THE WRIT

Whether the Court has signaled to the Clerk that anyone who is subject to an abortion will not be considered for a stay of lethal execution?

The testimony of John Ashcroft makes clear the fact that our legal profession puts social and financial "currency" above law, deferring instead to what the courts have "signaled".

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[1] This provision clearly indicates that class division among persons is in some sense foreign to the interpretation of the U.S. Constitution.

[2] Although this provision is complicated by the duty to exercise reasonable diligence in reducing an invention to practice, it nonetheless indicates conception as the true and ultimate reference for an actual priority of rights. In the case of procreation this complication does not arise because in this case conception and reduction to practice are consubstantial; for, regarding human persons, to be conceived is to be reduced to practice.

> "In the application for certiorari, I think on the *Stenberg* case, there was a request by one of the parties that *Roe* be reconsidered. The Supreme Court has signaled very clearly it doesn't want to deal with that issue again. I would say that I do not want to devalue the currency of the solicitor general of the United States by taking matters to the Supreme Court on a basis which the Supreme Court has already signaled: We don't want to deal with and were unwilling to deal with."—John Ashcroft, responding to Sen. Dianne Feinstein on the second day of his Senate Confirmation Hearing, Jan. 17, 2001.

Apparently, a stay of lethal execution for gestational children falls under the category of what the Court is unwilling to deal with. At least this is the signal the Clerk appears to have received.

According to the United States Postal Service, an Express Mail item ED00 4767 835US weighing five pounds, nine ounces was signed for by J Wood at the Court upon delivery at 11:05 am on October 05, 2004. The item in question was my application for a stay of lethal execution addressed to Justice O'Connor. The application was written in connection with my petition of recent memory.[3] The Clerk never acknowledged receipt of my application for stay. Mr. Troy Kahill of the Clerk's office became abrupt and hostile when it was suggested that the Clerk should investigate the disappearance. Months later, a telephone call was received from Mr. Carlos Outlaw. Apparently, Mr. Outlaw was at the time a prospective petitioner to the Court. He indicated that my application for a stay of execution had been returned to him at his address. He was distressed because he felt my application somehow caused the Clerk not to file his own petition. A private courier had to be sent to retrieve the application. There was no letter from the Clerk among the papers retrieved. Upon telephone inquiry, the Clerk stated there was no record of my application for a stay of execution.

The application might have been granted on its merits even if the associated petition was to be denied. Thus, one hypothesizes that a motive for subverting the application might have been to allow the Court to avoid dealing with what it has already signaled it is "unwilling to deal with". As Ashcroft's own testimony indicates, this practice certainly would not be uncommon at the Court.

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[3] *In re Eurica Californniaa*. 543 U.S. ___.

For this reason, integrity demands that the Court consider the application *nunc pro tunc*, in addition to currently. Although this may seem awkward, the awkwardness is provided by the fact that there is no excuse for playing games with an application for a stay of lethal execution. For even if the Court had found my application for stay to be frivolous, the Clerk should have observed decorum.

Whether granting inferior legal status to the gestational child is prohibited by Article I, Section 9, Clause 8 of the United States Constitution relating to titles of nobility?

The Framers were pretty clear on this subject: "No Title of Nobility shall be granted by the United States." Unfortunately, the culture of our nation was itself not so clear on the subject. Thus, it is not surprising, given the provincial twang that accents the mental dialect of our country's members, that titles of nobility continue to be granted, particularly in the reverse. By the reverse is meant more specifically a title of ignobility.

For example, felon status, technically speaking, is a title of nobility prohibited under Clause 8. More specifically, it is a title of ignobility. For relatively speaking it makes little difference whether we call ourselves above-common citizens and others common versus whether we call ourselves common citizens and others below-common. One should also be reminded of the arbitrariness involved. For example, a subject throws a piece of paper into a lord's favorite fishing pond—*that* is a felony!

Another example is provided in the wake of the September 11th attack, which seems to have given our twang a heavier accent. For now when we go to the airport, Government security officers assign us to distinct lines for screening based on our *class* of ticket. First Class and Business Class passengers are assigned the noble route, whereas Economy Class passengers are assigned to wait in the longer line as commoners! Especially irritating is that we are made to show our tickets on one or more occasions for the sole purpose of being sorted according to class!

Another example is provided by the arrogant belief that our children deserve inferior legal status based on the circumstances of gestation. Yet relying on Clause 8 in view of the Preamble, is it not unconstitutional to consider ourselves more noble than our posterity? The Court should take this profound legal consideration into account in granting a stay of lethal execution, including *sua sponte*.

Whether an actual priority of rights is to be assigned to the person at conception?

In my *amicus* brief for *Stenberg v. Carhart*, 530 U.S. 914, which the Clerk did not file, I noted a distinction in patent law between actual priority and effective priority. Under the modern standard of patent law, actual priority is assigned at conception, that is to say, to the moment at which an inventor conceives of his or her idea. This follows from an understanding that the invention exists before presentation to the Patent Office. But in some cases the moment of conception may be hard to establish exactly. In any case, with patent law, an effective priority is assigned *no later* than the date of filing, since obviously the invention has been conceived by then. Meaning, it would be absurd to doubt whether the invention was conceived by the time it was presented to the Patent Office!

In parallel, in my *amicus* brief I noted that physicians speak of the "presentation" of a child when he or she appears in readiness for birth. Accordingly, I argued, it would be wholly absurd to wait until *after* the child has presented to assign an effective priority to the child's life; thus, partial-birth abortion would have to be ruled out, since the act of homicide is committed subsequent to what even the medical community observes as the child's presentation. Meaning, relying on the language used by the profession, the act would have to be ruled out; for the failure to assign an effective priority no later than presentation would be as absurd as questioning whether an invention had been conceived by the time of filing!

It is also important to note that our ability to determine an effective priority is by no means limited to the presentation of the child in readiness for birth. Indeed, even though an actual priority in terms of the infinitesimally exact moment of conception may be hard or impossible for us to determine at this point in our knowledge, it is clear from the observation of early behaviors such as hatching that an effective priority can be easily established within an extremely short proximity of the exact moment of conception upon which an actual priority is to be assigned. Thus, to wait until the umbilical cord is cut, as some would have it, is to deny recognition for the fact that an effective priority of the person's life is easy to establish based on observable facts that present themselves almost immediately in the wake of the actual priority established at conception.

Another way to look at the question is to ask instead whether an effective priority of rights is to be assigned to the person no later

than presentation? I think it would be legally absurd for the Court to come to an opposite conclusion. From this it follows that the rights of the person must be constitutionally protected all the way down to the infinitesimally exact moment of conception. For it follows that any initial recognition for the child in gestational life can be viewed as an instance of presentation; thus, even a positive pregnancy test, for example, could be regarded at least indirectly as an instance of presentation. Consequently, the logical need to assign an effective priority of rights no later than presentation voids altogether the selfish perception that it is legal to deny a child his or her rights at any time, including all the way down to the infinitesimally exact moment of conception whenever that may be.

As a closing note, there is more to justice than ceasing in harm. There is also the effort to care. Thus, while it is pertinent and certainly within the Court's grasp to cease in harming children, I feel the Court should also be advised of our ability, unfettered by insults and prejudices, to bring care to the children. For this reason, in my continuing effort to educate the Court on the subject of progress in caring for gestational children, I have attached a copy of my article titled "Thermoregulation of human embryos and hatchlings in a prenidial incubator using infrared microthermography" (in press). See Appendix B. The incubation technology described enables us to separate mother and child prior to nidation and to place the child in an incubator. And so the Court may appreciate that while separation with the effort to care may be permissible, abortion, which is an act of homicide, is never permissible in any case, for the medico-legal distinction between a separation and an abortion still exists based on effort and intent even when viable care is beyond our grasp.

CONCLUSION

The petition for an extraordinary Writ of Mandamus should be granted.

Respectfully submitted,

Mr. Eurica Californiaa, Amb.
Juridic Embassy, Micro ICU Project

Date: May 16, 2005

UNITED STATES DISTRICT COURT
CENTRAL DISTRICT OF CALIFORNIA

CIVIL MINUTES – GENERAL

Case No. CV 95-0709 HLH
Date June 14, 1995
Title Eurica Californiaa v. William Rehnquist

DOCKET ENTRY

PRESENT:

HON. Harry L. Hupp, JUDGE
Milli Borgarding, Deputy Clerk

ATTORNEYS PRESENT FOR PLAINTIFFS: None Present
ATTORNEYS PRESENT FOR DEFENDANTS: None Present

PROCEEDINGS: Order Striking Petition

ORDER (also, if applicable, findings and memorandum opinion):

This action has already been dismissed. Thus, the "Request for Habeus [sic] Corpus and Stay of Execution" motion is stricken.

Initials of Deputy Clerk: //s//

Trends in Reproductive Biology. Vol. 1, 2005. (In Press)

Short-Communication

Title: Thermoregulation of Human Embryos and Hatchlings in a Prenidial Incubator using Infrared Microthermography

Short Title: Infrared microthermography for prenidial infant care

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ABSTRACT

A new trend in reproductive biology is to research advancements in medical care for the preimplantation patient on the basis of new technologies. Based on the size parameters of the preimplantation patient, the technologies of interest fall predominately under the head of integrated microfabrication technologies (IMT). Such technologies are able to produce integrated electrical, mechanical, and chemical systems and devices at the submillimeter, micrometer (micron), and nanometer scale. A few examples of IMT technologies include micro-electro-mechanical systems (MEMS), complementary metal oxide semiconductor (CMOS) technology, and nanotechnology. By employing microfabrication technologies in combination with large-scale technologies, the medicine-of-the-future will be able to care for the preimplantation patient in a sophisticated micro-milieu. A tragic fault of in vitro fertilization programs today is that most practitioners rely unimaginatively on crude laboratory dish methods suitable only for primitive biological specimens. Consequently, morbidity and mortality rates are extremely high in these programs. Of particular concern is that

programs based on a crude laboratory paradigm do not account for the actual body temperature of the preimplantation patient. For this reason, such programs do not offer accurate thermoregulation of the body temperature. However, accurate thermoregulation forms the basis of a competent incubator system. To provide accurate thermoregulation, an advanced incubator care system is needed which uses the techniques of infrared microthermography to monitor body temperature. On this basis a new breed of incubator is emerging for the preimplantation patient—known as the prenidial ("pre-NID-e-al") incubator, a word derived from pre-nidation.

KEYWORDS

Preimplantation development, embryo and hatchling, prenid, prenidial thermoregulation, incubator care, in vitro fertilization

INTRODUCTION

Prior to implantation, infants are free of attachment to the maternal body and are of a small size. Consequently, preimplantation infant care is amenable to the application of integrated microfabrication technologies (IMT). IMT technologies are able to produce integrated electrical, mechanical, and chemical systems and devices at the submillimeter, micrometer (micron), and nanometer scale. A few examples of IMT technologies include micro-electro-mechanical systems (MEMS), complementary metal oxide semiconductor (CMOS) technology, and nanotechnology. [1] By employing microfabrication technologies in combination with large-scale technologies, the medicine-of-the-future will be able to care for the preimplantation patient in a sophisticated micro-milieu.

Because preimplantation infants are amenable to specialized care, it is important to have a convenient terminology to refer to them. A child prior to implantation is called a prenid ("PRE-nid"), a word derived by shortening of pre-nidation. The word prenidial ("pre-NID-e-al") means pertaining to prenids or to life before implantation.

Prenids fall into two categories: embryos and hatchlings. Prenids prior to hatching are termed embryos; prenids after hatching are termed hatchlings. Historically, note that a lack of understanding of the human hatching behavior resulted in an incorrect application

of the term embryo, for it was once mistakenly thought that a fertilized egg simply "attached" to the uterine wall. As a result embryonic life was mistakenly assigned to an arbitrary length of time, rather than exclusively to life before hatching. Instead, it is now realized that an infant must literally hatch before implanting. [2]

Correctly understood, hatching is an early human behavior, observable when an embryo breaches the eggshell. Note that surgically assisted hatching, in which holes are surgically made in the eggshell in anticipation of hatching, confirms the animated nature of the hatching behavior, since an exit based on a pressure mechanism would be impossible when multiple holes are made present in the shell. [3-5] This understanding should be clear from the standpoint of biophysics, for notably the embryo would be unable to prefer one hole over another based on a pressure mechanism, and even so back pressure would escape through an opposing hole, thus making it impossible to hatch without involving actual movement. Consequently, hatching is correctly understood as a human behavior involving a type of movement.

It may be inferred that the basis for such movement is contained at the molecular level within cells. Also inferred is that hatching infants rely on molecular computing inside their cells for brain power, it being implied that brain power is rooted in molecular computing, and that the neurons formed later are simply differentiated as interconnects. Although the circumstances of the hatching behavior indicate that these inferences are more than mere hypotheses, it should not be surprising that along with advancing care for the prenidial infant is coming the knowledge to dispel old myths. This knowledge can be substantiated and improved by those who accept high technical standards.

In the past, under the auspices of in vitro fertilization, incubator care for prenidial infants has been plagued by low technical standards involving crude laboratory methods suitable for only the most primitive biological specimens. [6] Myths and prejudices combined with social and religious anxieties have impeded our progress. [7,8] A new trend in reproductive biology is to research development of a sophisticated micro-milieu for prenidial infants based on recent advances in IMT technology. Consequently, the age of a sophisticated incubator for prenidial infant care is now on our horizon.

PRENIDIAL THERMOREGULATION

A chief error in the development of the neonatal incubator was that physicians failed to account for the changing endogenous (internal) heat production of the infant due to growth; thus, early incubators faltered for failure to monitor body temperature and to thermoregulate accordingly. [9] Unfortunately, history has repeated itself with the advent of in vitro fertilization, for in this case practitioners have confused the temperature of the inside of an incubator, as measured by an incubator thermostat, with a measure of the true body temperatures of prenidial infants inside.

Simply put, practitioners did not appreciate the physical distinction between the body temperature and an environmental thermostat reading. Since the incubator creates a room-type microenvironment for the prenidial infant, confusing the incubator thermostat reading with a measure of body temperature is the same as confusing a wall thermostat reading of room temperature with a measure of someone's body temperature in the room. Instead, it is well known that a patient thermometer must be used to take the patient's body temperature separately, and that this variable is physically distinct from the variable of room temperature.

Thus, to improve regard for this understanding, it appears there needs to be some review of the fact that thermodynamics applies equally to microscopic and macroscopic dimensions. Since prenids produce heat endogenously, the temperature of the prenid`s environment will need to be cooler than the body temperature in order for heat to be dissipated at steady-state equilibrium. This is true because heat flows downhill in terms of the thermal gradient. It is this gradient of heat dissipation that implies an inherent physical distinction between a prenid`s temperature and the incubator temperature. Also, given two embryos in equally sized eggs in the same environment, in terms of a steady-state equilibrium the one with the greater endogenous heat production will have the higher body temperature, even though the environmental temperature is the same for both. Finally, as the capacity for endogenous heat production increases, for example due to size increase based on growth, the body has a greater potential to become overheated unless properly thermoregulated.

For these reasons, it is evident that body temperature must be monitored distinctly from the incubator thermostat which monitors

incubator temperature. A solution to this problem has been recently described in U.S patent no. 6,694,175. [10] According to the techniques of infrared microthermography, an infrared camera is fitted with a microscope lens, or is attached to a microscope, and the body temperature of the prenidial infant is monitored and measured distinctly from the temperature of the fluid incubation medium in which the infant is kept inside the incubator. In this way infrared microthermography is used to focus in on each infant's temperature as distinct from the temperature of the infant's microenvironment as established by the incubator.

Once the body temperature is measured, thermoregulation can be achieved using a feedback loop to control temperature. For fine temperature control, infrared light emitting diodes (IR-LEDs) are employed in the same way that an infrared heat lamp is used to keep a neonate warm. In other words, prenids are so small that an IR-LED serves as a heat lamp to keep the patient's body warm. In a prenidial incubator the fluid incubation medium is kept slightly cool to allow heat dissipation and to serve as a buffer against the patient's temperature getting too high. In turn, the IR-LEDs supply the remaining amount of heat and are continuously cycled by computer controls in relation to body temperature measurements so as to maintain the optimal temperature for the infant.

The taking of a patient's temperature as an indicator of health is one of the most basic practices of modern medicine. Additionally, accurate temperature-taking of the body temperature is essential for accurate thermoregulation, and accurate thermoregulation forms the basis of a competent incubator system. For this reason, the ability to monitor body temperature correctly and to thermoregulate accurately has hailed an advanced age of incubator care for the prenidial infant.

AN EMERGING TREND

Technical standards in the field of in vitro fertilization were initially approached with apathy because mortality rates were so high that it led practitioners to depreciate the dignity and worth of the prenidial infant. This tragic situation is paralleled historically by social views on the status of postpartum infants prior to the advent of pediatrics.

Harvard University's late pediatric historian Thomas E. Cone, Jr. explains that infant mortality was once considered

unfortunate but inevitable due to very high rates of mortality and a lack of advancement in infant care. For example, he notes that Queen Anne (1665-1714) gave birth seventeen times yet the longest survivor died as early as his eleventh year, and similarly that but one of Thomas Jefferson's (1743-1826) six children survived him. In other words, very high mortality rates were once common even among the wealthy and educated. Cone further reflects that the historian Edward Gibbon (1737-1794) noted in his *Memoirs* that "the death of a newborn child before that of its parents may seem an unnatural, but it is strictly a probable event, since of any given number born the greater number are extinguished before their ninth year. Without accusing the profuse waste or imperfect workmanship of Nature I shall only observe that this chance was multiplied against my infant experience." [11]

Unfortunately, similar apathy lingers on even today regarding what some view as "strictly a probable event" of mortality, to quote Gibbon. For example, having achieved only low technical standards for the care of the prenidial infant, the American Society for Reproductive Medicine (formerly the American Fertility Society) parallels this historical apathy by rationalizing that "the potential of a given zygote for full development is both statistical and conditional" in view of very high mortality rates. [12] Similarly, many adherents of religion or science have been queasy about affirming the early life of the person, for fear they will be accusing God or Nature of "profuse waste or imperfect workmanship" in view of very high mortality rates, again to quote Gibbon. Also, medical professionals have been insecure about their role in prenidial infant care. [13]

In contrast to these unproductive reservations, history and wisdom teach that our human calling is to subdue these trends of untimely mortality with advancements in care. For it was precisely on this basis that the discipline of pediatrics, established in the late 1800s, transformed the world in this regard. In a similar way, conceptiatrics ("con-sep-tee-AT-riks"), a word derived by combining conceptus with the accepted suffix –iatrics, is gradually emerging as the specialty of the child in gestational life. Thus, conceptiatrics endeavors to accomplish for children before birth what pediatrics has done for children afterwards. Prenidial medicine is a branch of conceptiatric medicine to treat of the child before implantation, whether in the context of incubator care or natural gestation.

The emerging trend of improving incubator care for the prenidial infant follows advancements in microfabrication technology. Key technical improvements in prenidial incubator development have emerged in the areas of thermoregulation, fluidic ventilation, and microcradle development. Fluidic ventilation means a slight flowing of the fluid incubation medium over the patient's body to refresh needed substances and to remove wastes without removing important endogenously produced substances. A microcradle is a small size cradle for a prenidial infant; the microcradle forms the central structure in a prenidial incubator environment. The size of prenidial infants makes them particularly amenable to IMT systems and devices. In 1995 Roux et al. reported the morphometric parameters of human embryos in earliest development created by in vitro fertilization as being 157.4 microns for the outer diameter of the egg, 17.9 microns for the thickness of the shell, and 121.8 microns for the inner diameter of the egg which bounds the cells of the infant's body inside. [14] However, these parameters can vary substantially based on physical differences, maternal condition, and the way mature oocytes are made available for fertilization. The embryo will expand inside the egg near hatching time and the shell will become thinner. Hatchlings require special care because they can invade or breach structures and become attached, lodged, or lost; also, their body tissues are directly exposed. Thus, systems and devices engineered for prenidial infants must take into account various morphological, physiological, and behavioral parameters and tolerances.

In 1998 Kim et al. at the UCLA Micromanufacturing Laboratory (University of California, Los Angeles) proposed adaptation of a microcage structure for use as a microcradle. The microcage is fabricated using an IMT technology called surface micromachining. The microcage has the appearance of a sea anemone and opens and closes under the action of pneumatic pressure applied to a diaphragm under the cage. Further development is needed to reduce the size of the microcage so that it can cradle a prenidial infant. [15]

In U.S. patent no. 6,448,069 Cecchi et al. teach a picket fence structure comprising posts to keep prenidial infants separated from one another in a communal setting while in their eggs. The picket fence structure is a type of microcradle. They teach the advantage that communal life provides a mutual contribution of beneficial

endogenous substances, and that the picket fence structure keeps the infants separated for track-keeping purposes. But they do not incorporate a ventilation system with their structure for the purpose of fluidic ventilation. [16]

In U.S. patent no. 6,673,008 Thompson et al. teach the necessity of fluidic ventilation for prenidial development in likeness to the fluidic ventilation provided by the fallopian tube. They rely on a well-type structure with a microporous floor to keep an embryo housed at the bottom of an enclosed tank. [17] Campbell et al. in published U.S. application no. 2002/0068358 also teach a well for housing an embryo. [18] The teaching of Beebe et al. in U.S. patent no. 6,193,647 somewhat appreciates the necessity of fluidic ventilation, however, their appreciation appears to be compromised by their objective of employing fluid flow to roll the eggs of embryos; consequently, the rate of fluid flow they suggest appears to be much too harsh by several orders of magnitude. They teach both well-type and channel-type structures for housing an embryo. [19]

The present author teaches a vented microcradle (patent pending) comprising a vented flooring surrounded by a picket fence enclosure. A grill-like pattern of vias in the flooring provides fluidic ventilation by means of associated microfluidics underneath. Microfluidics is an IMT technology for applying small-scale fluid flow. As is the case for a neonatal incubator, the cradle portion of a prenidial incubator must allow for easy access to a patient while at the same time affording proper thermoregulation and ventilation at all times; the vented microcradle satisfies these objectives. Additionally, the associated microfluidics can be used to channel fluid samples for chemical analysis and in conjunction with delivery of treatments. The vented microcradle can be made of glass using chemical etching, laser etching, and ion-beam etching. The advantage of glass is that the properties are inert, whereas more exotic materials have yet to be researched for any possible harmful effects to a developing infant.

Although there is an emerging trend of improving technical standards in the area of prenidial incubation, in many instances there still remains a taint of apathy regarding the need to recognize the dignity and worth of the person. In this regard, sometimes technical improvements are contradicted by a lack of human improvement. Nevertheless, the trend of both technical and human improvement is emerging. Notably, U.S. patent no. 6,694,175 is the first invention

for prenidial infant care to be classified with incubators for premature infants (current U.S. classification 600/22). This is because, with proper human and technical understanding, prenidial infants in incubators are indeed premature infants because it is premature for them to be outside the maternal body. [10]

Finally, it may be noted that in vitro fertilization technically refers only to the act of fertilization taking place in vitro. In contrast, the care of the child outside the maternal body regards prenidial incubation. Prenidial incubation promises application beyond use with in vitro fertilization. For example, if the mother dies in an accident and the means to detect her prenidial infant becomes available, the infant can be transferred to a prenidial incubator to await transfer to an adoptive mother. Similarly, if the mother's fallopian tube is found to be blocked or she requires treatments that might harm the infant, the child can be transferred to a prenidial incubator and then either transferred back or transferred to a surrogate mother. Thus, there is every reason to support the emerging trend of advancing care in the development of prenidial medicine and incubation. [20]

CONCLUSION

Advanced technology is making it increasingly possible to provide sophisticated incubator care for the preimplantation patient. A key step in this direction is provided by the advent of accurate thermoregulation techniques. Prenidial incubators may be likened to neonatal incubators, except they are for prenids instead of for neonates. There is a need for doctors and nurses to be trained in prenidial medicine.

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